Journal of Turbomachinery

Author Index

All authors of papers published in this volume are listed alphabetically. Full titles are included in each first author's entry. Letters in parentheses follow some of the page numbers: TB indicates Technical Brief, D indicates Discussion, and E indicates Errata.

Abhari, R. S. — (see Porreca, L.) **131**, 011002
Abhari, Reza S. — (see Aga, Vipluv) **131**, 041015
Abram, Roberto — (see Tanda, Giovanni) **131**, 021012
Acharya, Sumanta — (see Sethuraman, Eashwar) **131**, 021002
Adebayo, D. S. — (see Gostelow, J. P.) **131**, 021006
Aga, Vipluv, Mansour, Michel, and Abhari, Reza S. — Aerothermal Performance of Streamwise and Compound Angled Pulsating Film Cooling Jets. **131**, 041015
Ames, F. E. — (see Johnson, J. D.) **131**, 011016
An, Bai-Tao, Liu, Jian-Jun, and Jiang, Hong-De — Numerical Investigation on Unsteady Effects of Hot Streak on Flow and Heat Transfer in a Turbine Stage. **131**, 031015
Andrew, Philip L., and Kahveci, Harika S. — Validation of MISES Two-Dimensional Boundary Layer Code for High-Pressure Turbine Aerodynamic Design. **131**, 031013
Arima, Toshiyuki — (see Sonoda, Toyotaka) **131**, 011020

Barringer, M. D., Thole, K. A., and Polanka, M. D. — Effects of Combustor Exit Profiles on Vane Aerodynamic Loading and Heat Transfer in a High Pressure Turbine. **131**, 021008
____ , **Thole, K. A., and Polanka, M. D.** — An Experimental Study of Combustor Exit Profile Shapes on Endwall Heat Transfer in High Pressure Turbine Vanes. **131**, 021009
____ , **Thole, K. A., Polanka, M. D., Clark, J. P., and Koch, P. J.** — Migration of Combustor Exit Profiles Through High Pressure Turbine Vanes. **131**, 021010
Bauer, H.-J. — (see Stripf, M.) **131**, 031016
____ (see Stripf, M.) **131**, 031017
Beirow, B. — (see Klauke, T.) **131**, 031002
Bell, David — (see Rice, Tim) **131**, 011009
Bergholz, Robert F. — (see Tallman, James A.) **131**, 021001
Bethka, D. — (see Taslim, M. E.) **131**, 011021
Blake, Sarah A. — (see Wright, Lesley M.) **131**, 021017
Bleeg, James M., Yang, Ming-Ta, and Eley, James A. — Aeroelastic Analysis of Rotors With Flexible Disks and Alternate Blade Mistuning. **131**, 011011
Bloxham, M., Reimann, D., Crapo, K., Pluim, J., and Bons, J. P. — Synchronizing Separation Flow Control With Unsteady Wakes in a Low-Pressure Turbine Cascade. **131**, 021019
Bogard, David G. — (see Somawardhana, Ruwan P.) **131**, 011010
____ (see Harrison, Katharine L.) **131**, 011012
____ (see Jenkins, Sean C.) **131**, 041002
Bohn, Dieter E. — (see Johnson, Bruce V.) **131**, 021005
Bonaiuti, Duccio, and Zangeneh, Mehrdad — On the Coupling of Inverse Design and Optimization Techniques for the Multiobjective, Multipoint Design of Turbomachinery Blades. **131**, 021014
Bons, J. P. — (see Bloxham, M.) **131**, 021019
Boyle, R. J., and Stripf, M. — Simplified Approach to Predicting Rough Surface Transition. **131**, 041020
Brown, Jason M. — (see McClain, Stephen T.) **131**, 021020
Bulot, Nicolas — (see Trébinjac, Isabelle) **131**, 041011
Bunker, Ronald S. — (see Lu, Yiping) **131**, 011003
____ (see Lu, Yiping) **131**, 011005
____ (see Harrison, Katharine L.) **131**, 011012
____ The Effects of Manufacturing Tolerances on Gas Turbine Cooling. **131**, 041018

Cadrecha, D. — (see Marn, A.) **131**, 041014
Carullo, Jeffrey S. — (see Nasir, Shakeel) **131**, 021021
Cerretelli, Ciro, and Kirtley, Kevin — Boundary Layer Separation Control With Fluidic Oscillators. **131**, 041001
Chandra, Budi — (see Johnson, Graham) **131**, 041019
Chen, H. C. — (see Yang, H.) **131**, 041003
Chen, J.-P. — (see Southworth, S. A.) **131**, 031003
____ (see Haldeman, C. W.) **131**, 031004
Chu, Wuli — (see Lu, Xingen) **131**, 011001
Clark, J. P. — (see Barringer, M. D.) **131**, 021010
Corral, Roque, Gallardo, Juan Manuel, and Martel, Carlos — A Conceptual Flutter Analysis of a Packet of Vanes Using a Mass-Spring Model. **131**, 021016
Crapo, K. — (see Bloxham, M.) **131**, 021019
Cunat, Didier — (see Johnson, Bruce V.) **131**, 021005

Dawes, W. N. — (see Krishnababu, S. K.) **131**, 011006
____ (see Krishnababu, S. K.) **131**, 011007
____ (see Newton, P. J.) **131**, 011008
Dees, Jason E. — (see Harrison, Katharine L.) **131**, 011012
de la Rosa Blanco, E., Hodson, H. P., and Vazquez, R. — Effect of the Leakage Flows and the Upstream Platform Geometry on the Endwall Flows of a Turbine Cascade. **131**, 011004
de la Rosa Blanco, Elena — (see Vera, Maria) **131**, 011017
Dhungel, Alok — (see Lu, Yiping) **131**, 011003
____ (see Lu, Yiping) **131**, 011005
____ , **Lu, Yiping, Phillips, Wynn, Ekkad, Srinath V., and Heidmann, James** — Film Cooling From a Row of Holes Supplemented With Antivortex Holes. **131**, 021007
Diller, T. E. — (see Nix, A. C.) **131**, 021015
Ding, Shuiting — (see Tao, Zhi) **131**, 041005
Dorrington, John R. — (see Harrison, Katharine L.) **131**, 011012
Dunn, M. G. — (see Southworth, S. A.) **131**, 031003
____ (see Haldeman, C. W.) **131**, 031004
Dunn, Michael G. — (see Tallman, James A.) **131**, 021001
Durbin, Paul A. — (see Kodzwa, Paul M., Jr.) **131**, 031001

Eaton, John K. — (see Kodzwa, Paul M., Jr.) **131**, 031001
Ekkad, Srinath V. — (see Lu, Yiping) **131**, 011003
____ (see Lu, Yiping) **131**, 011005
____ (see Dhungel, Alok) **131**, 021007
Eley, James A. — (see Bleeg, James M.) **131**, 011011
Elkins, Christopher J. — (see Kodzwa, Paul M., Jr.) **131**, 031001
Emmrich, R., Hönen, H., and Niehuis, R. — Time Resolved Experimental Investigations of an Axial Compressor With Casing Treatment. **131**, 011018

Feng, Zhenping — (see Yan, Xin) **131**, 041009

Journal of Turbomachinery

Author Index

All authors of papers published in this volume are listed alphabetically. Full titles are included in each first author's entry. Letters in parentheses follow some of the page numbers: TB indicates Technical Brief, D indicates Discussion, and E indicates Errata.

Abhari, R. S. — (see Porreca, L.) **131**, 011002
Abhari, Reza S. — (see Aga, Vipluv) **131**, 041015
Abram, Roberto — (see Tanda, Giovanni) **131**, 021012
Acharya, Sumanta — (see Sethuraman, Eashwar) **131**, 021002
Adebayo, D. S. — (see Gostelow, J. P.) **131**, 021006
Aga, Vipluv, Mansour, Michel, and Abhari, Reza S. — Aerothermal Performance of Streamwise and Compound Angled Pulsating Film Cooling Jets. **131**, 041015
Ames, F. E. — (see Johnson, J. D.) **131**, 011016
An, Bai-Tao, Liu, Jian-Jun, and Jiang, Hong-De — Numerical Investigation on Unsteady Effects of Hot Streak on Flow and Heat Transfer in a Turbine Stage. **131**, 031015
Andrew, Philip L., and Kahveci, Harika S. — Validation of MISES Two-Dimensional Boundary Layer Code for High-Pressure Turbine Aerodynamic Design. **131**, 031013
Arima, Toshiyuki — (see Sonoda, Toyotaka) **131**, 011020

Barringer, M. D., Thole, K. A., and Polanka, M. D. — Effects of Combustor Exit Profiles on Vane Aerodynamic Loading and Heat Transfer in a High Pressure Turbine. **131**, 021008
____ , **Thole, K. A., and Polanka, M. D.** — An Experimental Study of Combustor Exit Profile Shapes on Endwall Heat Transfer in High Pressure Turbine Vanes. **131**, 021009
____ , **Thole, K. A., Polanka, M. D., Clark, J. P., and Koch, P. J.** — Migration of Combustor Exit Profiles Through High Pressure Turbine Vanes. **131**, 021010
Bauer, H.-J. — (see Stripf, M.) **131**, 031016
____ (see Stripf, M.) **131**, 031017
Beirow, B. — (see Klauke, T.) **131**, 031002
Bell, David — (see Rice, Tim) **131**, 011009
Bergholz, Robert F. — (see Tallman, James A.) **131**, 021001
Bethka, D. — (see Taslim, M. E.) **131**, 011021
Blake, Sarah A. — (see Wright, Lesley M.) **131**, 021017
Bleeg, James M., Yang, Ming-Ta, and Eley, James A. — Aeroelastic Analysis of Rotors With Flexible Disks and Alternate Blade Mistuning. **131**, 011011
Bloxham, M., Reimann, D., Crapo, K., Pluim, J., and Bons, J. P. — Synchronizing Separation Flow Control With Unsteady Wakes in a Low-Pressure Turbine Cascade. **131**, 021019
Bogard, David G. — (see Somawardhana, Ruwan P.) **131**, 011010
____ (see Harrison, Katharine L.) **131**, 011012
____ (see Jenkins, Sean C.) **131**, 041002
Bohn, Dieter E. — (see Johnson, Bruce V.) **131**, 021005
Bonaiuti, Duccio, and Zangeneh, Mehrdad — On the Coupling of Inverse Design and Optimization Techniques for the Multiobjective, Multipoint Design of Turbomachinery Blades. **131**, 021014
Bons, J. P. — (see Bloxham, M.) **131**, 021019
Boyle, R. J., and Stripf, M. — Simplified Approach to Predicting Rough Surface Transition. **131**, 041020
Brown, Jason M. — (see McClain, Stephen T.) **131**, 021020
Bulot, Nicolas — (see Trébinjac, Isabelle) **131**, 041011
Bunker, Ronald S. — (see Lu, Yiping) **131**, 011003
____ (see Lu, Yiping) **131**, 011005
____ (see Harrison, Katharine L.) **131**, 011012
____ The Effects of Manufacturing Tolerances on Gas Turbine Cooling. **131**, 041018

Cadrecha, D. — (see Marn, A.) **131**, 041014
Carullo, Jeffrey S. — (see Nasir, Shakeel) **131**, 021021
Cerretelli, Ciro, and Kirtley, Kevin — Boundary Layer Separation Control With Fluidic Oscillators. **131**, 041001
Chandra, Budi — (see Johnson, Graham) **131**, 041019
Chen, H. C. — (see Yang, H.) **131**, 041003
Chen, J.-P. — (see Southworth, S. A.) **131**, 031003
____ (see Haldeman, C. W.) **131**, 031004
Chu, Wuli — (see Lu, Xingen) **131**, 011001
Clark, J. P. — (see Barringer, M. D.) **131**, 021010
Corral, Roque, Gallardo, Juan Manuel, and Martel, Carlos — A Conceptual Flutter Analysis of a Packet of Vanes Using a Mass-Spring Model. **131**, 021016
Crapo, K. — (see Bloxham, M.) **131**, 021019
Cunat, Didier — (see Johnson, Bruce V.) **131**, 021005

Dawes, W. N. — (see Krishnababu, S. K.) **131**, 011006
____ (see Krishnababu, S. K.) **131**, 011007
____ (see Newton, P. J.) **131**, 011008
Dees, Jason E. — (see Harrison, Katharine L.) **131**, 011012
de la Rosa Blanco, E., Hodson, H. P., and Vazquez, R. — Effect of the Leakage Flows and the Upstream Platform Geometry on the Endwall Flows of a Turbine Cascade. **131**, 011004
de la Rosa Blanco, Elena — (see Vera, Maria) **131**, 011017
Dhungel, Alok — (see Lu, Yiping) **131**, 011003
____ (see Lu, Yiping) **131**, 011005
____ , **Lu, Yiping, Phillips, Wynn, Ekkad, Srinath V., and Heidmann, James** — Film Cooling From a Row of Holes Supplemented With Antivortex Holes. **131**, 021007
Diller, T. E. — (see Nix, A. C.) **131**, 021015
Ding, Shuiting — (see Tao, Zhi) **131**, 041005
Dorrington, John R. — (see Harrison, Katharine L.) **131**, 011012
Dunn, M. G. — (see Southworth, S. A.) **131**, 031003
____ (see Haldeman, C. W.) **131**, 031004
Dunn, Michael G. — (see Tallman, James A.) **131**, 021001
Durbin, Paul A. — (see Kodzwa, Paul M., Jr.) **131**, 031001

Eaton, John K. — (see Kodzwa, Paul M., Jr.) **131**, 031001
Ekkad, Srinath V. — (see Lu, Yiping) **131**, 011003
____ (see Lu, Yiping) **131**, 011005
____ (see Dhungel, Alok) **131**, 021007
Eley, James A. — (see Bleeg, James M.) **131**, 011011
Elkins, Christopher J. — (see Kodzwa, Paul M., Jr.) **131**, 031001
Emmrich, R., Hönen, H., and Niehuis, R. — Time Resolved Experimental Investigations of an Axial Compressor With Casing Treatment. **131**, 011018

Feng, Zhenping — (see Yan, Xin) **131**, 041009

Fiala, N. J. — (see Johnson, J. D.) **131**, 011016
Foord, Colin — (see Johnson, Graham) **131**, 041019

Gaetani, P. — (see Persico, G.) **131**, 031006
Gallardo, Juan Manuel — (see Corral, Roque) **131**, 021016
Gao, Z. — (see Yang, H.) **131**, 041003
Gao, Zhihong, Narzary, Diganta P., and Han, Je-Chin — Film-Cooling on a Gas Turbine Blade Pressure Side or Suction Side With Compound Angle Shaped Holes. **131**, 011019
_____, **Narzary, Diganta, Mhetras, Shantanu, and Han, Je-Chin** — Effect of Inlet Flow Angle on Gas Turbine Blade Tip Film Cooling. **131**, 031005
_____, **Narzary, Diganta, and Han, Je-Chin** — Turbine Blade Platform Film Cooling With Typical Stator-Rotor Purge Flow and Discrete-Hole Film Cooling. **131**, 041004
Ghisu, Tiziano — (see Jarrett, Jerome P.) **131**, 031018
Golze, M. — (see Klauke, T.) **131**, 031002
Gostelow, J. P., Thomas, R. L., and Adebayo, D. S. — On the Response of a Strongly Diffusing Flow to Propagating Wakes. **131**, 021006
Göttlich, E. — (see Marn, A.) **131**, 041014
Gourdain, Nicolas, and Leboeuf, Francis — Unsteady Simulation of an Axial Compressor Stage With Casing and Blade Passive Treatments. **131**, 021013
Greitzer, Edward M. — Some Aerodynamic Problems of Aircraft Engines: Fifty Years After -The 2007 IGTI Scholar Lecture-. **131**, 031101

Haldeman, C. W. — (see Southworth, S. A.) **131**, 031003
_____, **Dunn, M. G., Southworth, S. A., Chen, J.-P., Heitland, G., and Liu, J.** — Time-Accurate Predictions for a Fully Cooled High-Pressure Turbine Stage—Part II: Methodology for Quantifications of Prediction Quality. **131**, 031004
Haldeman, Charles W. — (see Tallman, James A.) **131**, 021001
Hall, Kenneth C. — (see Miyakozawa, Tomokazu) **131**, 041008
Han, J. C. — (see Suryanarayanan, A.) **131**, 011014
_____ (see Yang, H.) **131**, 041003
Han, Je-Chin — (see Gao, Zhihong) **131**, 011019
_____ (see Wright, Lesley M.) **131**, 021017
_____ (see Gao, Zhihong) **131**, 031005
_____ (see Gao, Zhihong) **131**, 041004
_____ (see Liu, Yao-Hsien) **131**, 041017
Hannis, J. — (see Krishnababu, S. K.) **131**, 011006
_____ (see Krishnababu, S. K.) **131**, 011007
_____ (see Newton, P. J.) **131**, 011008
Harrison, Katharine L., Dorrington, John R., Dees, Jason E., Bogard, David G., and Bunker, Ronald S. — Turbine Airfoil Net Heat Flux Reduction With Cylindrical Holes Embedded in a Transverse Trench. **131**, 011012
Hasenjäger, Martina — (see Sonoda, Toyotaka) **131**, 011020
Heidmann, James — (see Dhungel, Alok) **131**, 021007
Heitland, G. — (see Southworth, S. A.) **131**, 031003
_____ (see Haldeman, C. W.) **131**, 031004
Hodson, H. P. — (see de la Rosa Blanco, E.) **131**, 011004
_____ (see Krishnababu, S. K.) **131**, 011006
_____ (see Krishnababu, S. K.) **131**, 011007
_____ (see Newton, P. J.) **131**, 011008
Hodson, Howard — (see Vera, Maria) **131**, 011017
Holley, Brian M., and Langston, Lee S. — Surface Shear Stress and Pressure Measurements in a Turbine Cascade. **131**, 031014
Hönen, H. — (see Emmrich, R.) **131**, 011018
Horn, Wolfgang, Schmidt, Klaus-Jürgen, and Staudacher, Stephan — Effects of Compressor Tip Injection on Aircraft Engine Performance and Stability. **131**, 031011
Huh, Michael — (see Liu, Yao-Hsien) **131**, 041017

Jakoby, Ralf — (see Johnson, Bruce V.) **131**, 021005
Jarrett, Jerome P., Ghisu, Tiziano, and Parks, Geoffrey T. — On the Coupling of Designer Experience and Modularity in the Aerothermal Design of Turbomachinery. **131**, 031018
Jenkins, Sean C., and Bogard, David G. — Superposition Predictions of the Reduction of Hot Streaks by Coolant From a Film-Cooled Guide Vane. **131**, 041002
Jiang, Hong-De — (see An, Bai-Tao) **131**, 031015
Johnson, Bruce V., Jakoby, Ralf, Bohn, Dieter E., and Cunat, Didier — A Method for Estimating the Influence of Time-Dependent Vane and Blade Pressure Fields on Turbine Rim Seal Ingestion. **131**, 021005
Johnson, Graham, Chandra, Budi, Foord, Colin, and Simmons, Kathy — Windage Power Losses From Spiral Bevel Gears With Varying Oil Flows and Shroud Configurations. **131**, 041019
Johnson, J. D., Fiala, N. J., and Ames, F. E. — Gill Slot Trailing Edge Aerodynamics: Effects of Blowing Rate, Reynolds Number, and External Turbulence on Aerodynamic Losses and Pressure Distribution. **131**, 011016

Kahveci, Harika S. — (see Andrew, Philip L.) **131**, 031013
Kalfas, A. I. — (see Porreca, L.) **131**, 011002
Kempf, Severin — (see McGlumphy, Jonathan) **131**, 021018
Kielb, Robert E. — (see Miyakozawa, Tomokazu) **131**, 041008
Kirtley, Kevin — (see Cerretelli, Ciro) **131**, 041001
Klauke, T., Kühhorn, A., Beirow, B., and Golze, M. — Numerical Investigations of Localized Vibrations of Mistuned Blade Integrated Disks (Blisks). **131**, 031002
Kluß, David, Stoff, Horst, and Wiedermann, Alexander — Effect of Wakes and Secondary Flow on Re-attachment of Turbine Exit Annular Diffuser Flow. **131**, 041012
Koch, P. J. — (see Barringer, M. D.) **131**, 021010
Kodzwa, Paul M., Jr., Vicharelli, Amanda, Medic, Gorazd, Elkins, Christopher J., Eaton, John K., Laskowski, Gregory M., and Durbin, Paul A. — Evaluation of Alternatives for Two-Dimensional Linear Cascade Facilities. **131**, 031001
König, Sven, Stoffel, Bernd, and Taher Schobeiri, M. — Experimental Investigation of the Clocking Effect in a 1.5-Stage Axial Turbine—Part I: Time-Averaged Results. **131**, 021003
_____, **Stoffel, Bernd, and Taher Schobeiri, M.** — Experimental Investigation of the Clocking Effect in a 1.5-Stage Axial Turbine—Part II: Unsteady Results and Boundary Layer Behavior. **131**, 021004
Kožulović, Dragan, and Lapworth, B. Leigh — An Approach for Inclusion of a Nonlocal Transition Model in a Parallel Unstructured Computational Fluid Dynamics Code. **131**, 031008
Krishnababu, S. K., Newton, P. J., Dawes, W. N., Lock, G. D., Hodson, H. P., Hannis, J., and Whitney, C. — Aerothermal Investigations of Tip Leakage Flow in Axial Flow Turbines—Part I: Effect of Tip Geometry and Tip Clearance Gap. **131**, 011006
_____, **Dawes, W. N., Hodson, H. P., Lock, G. D., Hannis, J., and Whitney, C.** — Aerothermal Investigations of Tip Leakage Flow in Axial Flow Turbines—Part II: Effect of Relative Casing Motion. **131**, 011007
_____ (see Newton, P. J.) **131**, 011008
Kühhorn, A. — (see Klauke, T.) **131**, 031002
Kulisa, Pascale — (see Trébinjac, Isabelle) **131**, 041011

Langston, Lee S. — (see Holley, Brian M.) **131**, 031014
Lapworth, B. Leigh — (see Kožulović, Dragan) **131**, 031008
Laskowski, Gregory M. — (see Kodzwa, Paul M., Jr.) **131**, 031001
Leboeuf, Francis — (see Gourdain, Nicolas) **131**, 021013
Léonard, O. — (see Simon, J.-F.) **131**, 031019
Li, Jun — (see Yan, Xin) **131**, 041009
Liu, J. — (see Southworth, S. A.) **131**, 031003
_____ (see Haldeman, C. W.) **131**, 031004
Liu, Jian-Jun — (see An, Bai-Tao) **131**, 031015

Liu, Yao-Hsien, Huh, Michael, Rhee, Dong-Ho, Han, Je-Chin, and Moon, Hee-Koo — Heat Transfer in Leading Edge, Triangular Shaped Cooling Channels With Angled Ribs Under High Rotation Numbers. **131**, 041017
Lock, G. D. — (see Krishnababu, S. K.) **131**, 011006
_____ (see Krishnababu, S. K.) **131**, 011007
_____ (see Newton, P. J.) **131**, 011008
Lu, Xingen, Chu, Wuli, Zhu, Junqiang, and Zhang, Yangfeng — Numerical Investigations of the Coupled Flow Through a Subsonic Compressor Rotor and Axial Skewed Slot. **131**, 011001
Lu, Yiping, Dhungel, Alok, Ekkad, Srinath V., and Bunker, Ronald S. — Effect of Trench Width and Depth on Film Cooling From Cylindrical Holes Embedded in Trenches. **131**, 011003
_____, **Dhungel, Alok, Ekkad, Srinath V., and Bunker, Ronald S.** — Film Cooling Measurements for Cratered Cylindrical Inclined Holes. **131**, 011005
_____ (see Dhungel, Alok) **131**, 021007
Luo, Jiang, and Razinsky, Eli H. — Analysis of Turbulent Flow in 180 deg Turning Ducts With and Without Guide Vanes. **131**, 021011

Mansour, Michel — (see Aga, Vipluv) **131**, 041015
Marn, A., Göttlich, E., Cadrecha, D., and Pirker, H. P. — Shorten the Intermediate Turbine Duct Length by Applying an Integrated Concept. **131**, 041014
Martel, Carlos — (see Corral, Roque) **131**, 021016
McClain, Stephen T., and Brown, Jason M. — Reduced Rough-Surface Parametrization for Use With the Discrete-Element Model. **131**, 021020
McGlumphy, Jonathan, Ng, Wing-Fai, Wellborn, Steven R., and Kempf, Severin — Numerical Investigation of Tandem Airfoils for Subsonic Axial-Flow Compressor Blades. **131**, 021018
Medic, Gorazd — (see Kodzwa, Paul M., Jr.) **131**, 031001
Menter, Florian R. — (see Smirnov, Pavel E.) **131**, 041010
Mhetras, S. P. — (see Suryanarayanan, A.) **131**, 011014
Mhetras, Shantanu — (see Gao, Zhihong) **131**, 031005
Miller, Robert J. — (see Wheeler, Andrew P. S.) **131**, 041013
Miyakozawa, Tomokazu, Kielb, Robert E., and Hall, Kenneth C. — The Effects of Aerodynamic Asymmetric Perturbations on Forced Response of Bladed Disks. **131**, 041008
Moon, Hee Koo — (see Nasir, Shakeel) **131**, 021021
Moon, Hee-Koo — (see Liu, Yao-Hsien) **131**, 041017
Morris, R. M. — (see Scheepers, Gerard) **131**, 044501(TB)
Mureithi, Njuki W. — (see Thomassin, Jean) **131**, 011013

Narzary, Diganta — (see Gao, Zhihong) **131**, 031005
_____ (see Gao, Zhihong) **131**, 041004
Narzary, Diganta P. — (see Gao, Zhihong) **131**, 011019
Nasir, Shakeel, Carullo, Jeffrey S., Ng, Wing-Fai, Thole, Karen A., Wu, Hong, Zhang, Luzeng J., and Moon, Hee Koo — Effects of Large Scale High Freestream Turbulence and Exit Reynolds Number on Turbine Vane Heat Transfer in a Transonic Cascade. **131**, 021021
Newton, P. J. — (see Krishnababu, S. K.) **131**, 011006
_____, **Lock, G. D., Krishnababu, S. K., Hodson, H. P., Dawes, W. N., Hannis, J., and Whitney, C.** — Aerothermal Investigations of Tip Leakage Flow in Axial Flow Turbines—Part III: TIP Cooling. **131**, 011008
Ng, Wing-Fai — (see McGlumphy, Jonathan) **131**, 021018
_____ (see Nasir, Shakeel) **131**, 021021
Niehuis, R. — (see Emmrich, R.) **131**, 011018
Nikitopoulos, Dimitris E. — (see Sethuraman, Eashwar) **131**, 021002
Nix, A. C., and Diller, T. E. — Experiments on the Physical Mechanism of Heat Transfer Augmentation by Freestream Turbulence at a Cylinder Stagnation Point. **131**, 021015

Osnaghi, C. — (see Persico, G.) **131**, 031006

Parks, Geoffrey T. — (see Jarrett, Jerome P.) **131**, 031018
Persico, G., Gaetani, P., and Osnaghi, C. — A Parametric Study of the Blade Row Interaction in a High Pressure Turbine Stage. **131**, 031006
Phillips, Wynn — (see Dhungel, Alok) **131**, 021007
Pirker, H. P. — (see Marn, A.) **131**, 041014
Pluim, J. — (see Bloxham, M.) **131**, 021019
Polanka, M. D. — (see Barringer, M. D.) **131**, 021008
_____ (see Barringer, M. D.) **131**, 021009
_____ (see Barringer, M. D.) **131**, 021010
Porreca, L., Kalfas, A. I., Abhari, R. S., Yun, Y. I., and Song, S. J. — Interstage Flow Interactions and Loss Generation in a Two-Stage Shrouded Axial Turbine. **131**, 011002
Povey, Thomas, and Qureshi, Imran — Developments in Hot-Streak Simulators for Turbine Testing. **131**, 031009

Qureshi, Imran — (see Povey, Thomas) **131**, 031009

Razinsky, Eli H. — (see Luo, Jiang) **131**, 021011
Reimann, D. — (see Bloxham, M.) **131**, 021019
Rhee, Dong-Ho — (see Wright, Lesley M.) **131**, 021017
_____ (see Liu, Yao-Hsien) **131**, 041017
Rice, Tim, Bell, David, and Singh, Gurnam — Identification of the Stability Margin Between Safe Operation and the Onset of Blade Flutter. **131**, 011009
Rochuon, Nicolas — (see Trébinjac, Isabelle) **131**, 041011
Roduner, C. H. — (see Spakovszky, Z. S.) **131**, 031012

Sabatino, D. R., and Smith, C. R. — Boundary Layer Influence on the Unsteady Horseshoe Vortex Flow and Surface Heat Transfer. **131**, 011015
Sarkar, S. — Influence of Wake Structure on Unsteady Flow in a Low Pressure Turbine Blade Passage. **131**, 041016
Scheepers, Gerard, and Morris, R. M. — Experimental Study of Heat Transfer Augmentation Near the Entrance to a Film Cooling Hole in a Turbine Blade Cooling Passage. **131**, 044501(TB)
Schmidt, Klaus-Jürgen — (see Horn, Wolfgang) **131**, 031011
Schobeir, M. T. — (see Yang, H.) **131**, 041003
Schobeiri, M. T. — (see Suryanarayanan, A.) **131**, 011014
Schulz, A. — (see Stripf, M.) **131**, 031016
_____ (see Stripf, M.) **131**, 031017
Sendhoff, Bernhard — (see Sonoda, Toyotaka) **131**, 011020
Sethuraman, Eashwar, Acharya, Sumanta, and Nikitopoulos, Dimitris E. — Mass/Heat Transfer in Rotating, Smooth, High-Aspect Ratio (4:1) Coolant Channels With Curved Walls. **131**, 021002
Simmons, Kathy — (see Johnson, Graham) **131**, 041019
Simon, J.-F., Thomas, J. P., and Léonard, O. — On the Role of the Deterministic and Circumferential Stresses in Throughflow Calculations. **131**, 031019
Simpson, A. T., Spence, S. W. T., and Watterson, J. K. — A Comparison of the Flow Structures and Losses Within Vaned and Vaneless Stators for Radial Turbines. **131**, 031010
Singh, Gurnam — (see Rice, Tim) **131**, 011009
Sinha, Alok — Reduced-Order Model of a Bladed Rotor With Geometric Mistuning. **131**, 031007
Smirnov, Pavel E., and Menter, Florian R. — Sensitization of the SST Turbulence Model to Rotation and Curvature by Applying the Spalart–Shur Correction Term. **131**, 041010
Smith, C. R. — (see Sabatino, D. R.) **131**, 011015
Sofia, Alessandro — (see Wheeler, Andrew P. S.) **131**, 041013
Somawardhana, Ruwan P., and Bogard, David G. — Effects of Obstructions and Surface Roughness on Film Cooling

Effectiveness With and Without a Transverse Trench. **131**, 011010
Song, Liming — (see Yan, Xin) **131**, 041009
Song, S. J. — (see Porreca, L.) **131**, 011002
Sonoda, Toyotaka, Hasenjäger, Martina, Arima, Toshiyuki, and Sendhoff, Bernhard — Effect of End Wall Contouring on Performance of Ultra-Low Aspect Ratio Transonic Turbine Inlet Guide Vanes. **131**, 011020
Southworth, S. A., Dunn, M. G., Haldeman, C. W., Chen, J.-P., Heitland, G., and Liu, J. — Time-Accurate Predictions for a Fully Cooled High-Pressure Turbine Stage—Part I: Comparison of Predictions With Data. **131**, 031003
____ (see Haldeman, C. W.) **131**, 031004
Spakovszky, Z. S., and Roduner, C. H. — Spike and Modal Stall Inception in an Advanced Turbocharger Centrifugal Compressor. **131**, 031012
Spence, S. W. T. — (see Simpson, A. T.) **131**, 031010
Staudacher, Stephan — (see Horn, Wolfgang) **131**, 031011
Stoff, Horst — (see Kluß, David) **131**, 041012
Stoffel, Bernd — (see König, Sven) **131**, 021003
____ (see König, Sven) **131**, 021004
Stripf, M., Schulz, A., Bauer, H.-J., and Wittig, S. — Extended Models for Transitional Rough Wall Boundary Layers With Heat Transfer—Part I: Model Formulations. **131**, 031016
____, **Schulz, A., Bauer, H.-J., and Wittig, S.** — Extended Models for Transitional Rough Wall Boundary Layers With Heat Transfer—Part II: Model Validation and Benchmarking. **131**, 031017
____ (see Boyle, R. J.) **131**, 041020
Sundaram, N., and Thole, K. A. — Film-Cooling Flowfields With Trenched Holes on an Endwall. **131**, 041007
Suryanarayanan, A., Mhetras, S. P., Schobeiri, M. T., and Han, J. C. — Film-Cooling Effectiveness on a Rotating Blade Platform. **131**, 011014

Taher Schobeiri, M. — (see König, Sven) **131**, 021003
____ (see König, Sven) **131**, 021004
Tallman, James A., Haldeman, Charles W., Dunn, Michael G., Tolpadi, Anil K., and Bergholz, Robert F. — Heat Transfer Measurements and Predictions for a Modern, High-Pressure, Transonic Turbine, Including Endwalls. **131**, 021001
Tanda, Giovanni, and Abram, Roberto — Forced Convection Heat Transfer in Channels With Rib Turbulators Inclined at 45 deg. **131**, 021012
Tao, Zhi, Zhao, Zhenming, Ding, Shuiting, Xu, Guoqiang, Yang, Bin, and Wu, Hongwei — Heat Transfer Coefficients of Film Cooling on a Rotating Turbine Blade Model—Part I: Effect of Blowing Ratio. **131**, 041005
Taslim, M. E., and Bethka, D. — Experimental and Numerical Impingement Heat Transfer in an Airfoil Leading-Edge Cooling Channel With Cross-Flow. **131**, 011021
Thole, K. A. — (see Barringer, M. D.) **131**, 021008
____ (see Barringer, M. D.) **131**, 021009
____ (see Barringer, M. D.) **131**, 021010
____ (see Sundaram, N.) **131**, 041007
Thole, Karen A. — (see Nasir, Shakeel) **131**, 021021
Thomas, J. P. — (see Simon, J.-F.) **131**, 031019
Thomas, R. L. — (see Gostelow, J. P.) **131**, 021006
Thomassin, Jean, Vo, Huu Duc, and Mureithi, Njuki W. — Blade Tip Clearance Flow and Compressor Nonsynchronous Vibrations: The Jet Core Feedback Theory as the Coupling Mechanism. **131**, 011013
Tolpadi, Anil K. — (see Tallman, James A.) **131**, 021001
Trébinjac, Isabelle, Kulisa, Pascale, Bulot, Nicolas, and Rochuon, Nicolas — Effect of Unsteadiness on the Performance of a Transonic Centrifugal Compressor Stage. **131**, 041011

Vazquez, R. — (see de la Rosa Blanco, E.) **131**, 011004
Vazquez, Raul — (see Vera, Maria) **131**, 011017
Vera, Maria, de la Rosa Blanco, Elena, Hodson, Howard, and Vazquez, Raul — Endwall Boundary Layer Development in an Engine Representative Four-Stage Low Pressure Turbine Rig. **131**, 011017
Vicharelli, Amanda — (see Kodzwa, Paul M., Jr.) **131**, 031001
Vo, Huu Duc — (see Thomassin, Jean) **131**, 011013

Watterson, J. K. — (see Simpson, A. T.) **131**, 031010
Wellborn, Steven R. — (see McGlumphy, Jonathan) **131**, 021018
Wheeler, Andrew P. S., Sofia, Alessandro, and Miller, Robert J. — The Effect of Leading-Edge Geometry on Wake Interactions in Compressors. **131**, 041013
Whitney, C. — (see Krishnababu, S. K.) **131**, 011006
____ (see Krishnababu, S. K.) **131**, 011007
____ (see Newton, P. J.) **131**, 011008
Wiedermann, Alexander — (see Kluß, David) **131**, 041012
Wittig, S. — (see Stripf, M.) **131**, 031016
____ (see Stripf, M.) **131**, 031017
Wright, Lesley M., Blake, Sarah A., Rhee, Dong-Ho, and Han, Je-Chin — Effect of Upstream Wake With Vortex on Turbine Blade Platform Film Cooling With Simulated Stator-Rotor Purge Flow. **131**, 021017
Wu, Hong — (see Nasir, Shakeel) **131**, 021021
Wu, Hongwei — (see Tao, Zhi) **131**, 041005

Xu, Guoqiang — (see Tao, Zhi) **131**, 041005

Yan, Xin, Li, Jun, Song, Liming, and Feng, Zhenping — Investigations on the Discharge and Total Temperature Increase Characteristics of the Labyrinth Seals With Honeycomb and Smooth Lands. **131**, 041009
Yang, Bin — (see Tao, Zhi) **131**, 041005
Yang, H., Gao, Z., Chen, H. C., Han, J. C., and Schobeir, M. T. — Prediction of Film Cooling and Heat Transfer on a Rotating Blade Platform With Stator-Rotor Purge and Discrete Film-Hole Flows in a 1-$\frac{1}{2}$ Turbine Stage. **131**, 041003
Yang, Ming-Ta — (see Bleeg, James M.) **131**, 011011
Yun, Y. I. — (see Porreca, L.) **131**, 011002

Zangeneh, Mehrdad — (see Bonaiuti, Duccio) **131**, 021014
Zhang, Luzeng J. — (see Nasir, Shakeel) **131**, 021021
Zhang, Yangfeng — (see Lu, Xingen) **131**, 011001
Zhao, Zhenming — (see Tao, Zhi) **131**, 041005
Zhu, Junqiang — (see Lu, Xingen) **131**, 011001